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## Psychosocial Stress & Mental Health in a Forward-Deployed Military Community

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### ABSTRACT

An important issue for military behavioral scientists concerns the possible impact of force reductions and other life stressors on the mental health, morale and performance of military personnel. The most recent (1993) Uniformed Personnel Opinion Survey (UPOS) in Europe assessed perceived stress levels in various areas of experience, such as Professional Duties and Family Responsibilities, and inquired directly about stress experienced as a function of mandated "Reductions in Force" (RIF). Mental health was measured with an 11-item scale of depressive symptomatology. Depressive symptoms are conceived as a function of low morale, with performance consequences for daily soldier functioning. Usable surveys were obtained from 5,198 respondents, giving a good representation of the active-duty Army population in Europe, as well as spouses and Army civilian employees. Stepwise multiple regressions examined the impact of psychosocial stressors on mental health as indexed by frequency of depressive symptomatology. Results confirmed that stress experienced in several key areas has a substantial relation to mental health in the military community. For the sample as a whole (70% active duty, 78% married, 65% male) stress associated with Personal, Job, and Family Responsibilities yielded a highly significant model ( $F = 446.89$ ,  $p < .0001$ ) predicting total depression days, with a Multiple R of .47. For soldiers in dual-military couples ( $N = 280$ ), and for those with spouses working outside the Army ( $N = 1,581$ ), the strongest predictors of depression are Job and Family area stressors (Multiple R .28 and .44 respectively). For soldiers with working spouses and 2 or more children at home, mental health is also predicted by reported stress levels associated with Force Reductions. It is likely that financial security considerations weigh most heavily on this sub-group of the active-duty population. Despite much speculation on "drawdown stress" having a negative impact on soldiers and their families, this is the first study to empirically demonstrate deleterious mental health effects associated with force reductions.

Paper presented at the Sixth Annual Convention of the American Psychological Society, Washington, DC, July 1994. Address comments to:

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## SUMMARY

The impact of perceived stressful experiences on mental health was studied using 1993 survey data from a representative sample (N=5,235) of the Army population in Europe. Regression results show stress in various life areas (personal, job, family) strongly predicts depression. Stress associated with mandated force reductions is also a predictor of depression for soldiers with children and working spouses. This study demonstrates empirically that stress associated with military force reductions is related to negative mental health effects.

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## **BACKGROUND**

**An important issue for military behavioral scientists concerns the possible impact of force reductions and other life stressors on the mental health, morale and performance of military personnel. Increased stress associated with force reorganization and downsizing can lead to a "hollow force" by driving good employees to quit, and by leaving survivors with a lowered sense of commitment. Each year, the U.S. Army in Europe (USAREUR) conducts a comprehensive opinion survey in a stratified random sample of the forward-deployed Army population. The most recent (1993) USAREUR Personnel Opinion Survey (UPOS) assessed perceived stress levels in various areas of experience, such as Professional Duties and Family Responsibilities, and inquired directly about stress experienced as a function of mandated "Reductions in Force" (RIF). Mental health was measured with a short (11-item) form of the CES-D depression scale. Depression is conceived here as a function of low morale, with performance consequences for daily soldier functioning.**

## METHODS

Usable surveys were obtained from 5,235 respondents, giving a good representation of the active-duty Army population in Europe, as well as spouses and Army civilian employees. The 11-item depression scale asks respondents to indicate how many days out of the last week each symptom was experienced. Respondents were also asked to rate the level of stress experienced in each of five areas: (1) professional duties, (2) family responsibilities, (3) personal responsibilities, (4) USAREUR drawdown, and (5) Reduction-in-Force - RIF. A "Reduction-in-Force" is a mechanism by which service members are separated from the service before they wish to be. Stepwise multiple regressions were applied to examine the impact of reported stress levels on depression.

## RESULTS

Results confirmed that stress experienced in several key areas has a substantial relation to mental health in the military community. For the sample as a whole (70% active duty, 78% married, 65% male) stress associated with: Personal, Job, and Family Responsibilities yielded a highly significant model ( $F=446.89$ ,  $p < .0001$ ) predicting total depression days, with a Multiple R of .47. For soldiers in dual-military couples ( $N=280$ ), and for those with spouses working outside the Army ( $N=1,581$ ), the strongest predictors of depression are Job and Family area stressors (Multiple R .28 and .44 respectively). For soldiers with working spouses and 2 or more children at home, mental health is also predicted by reported stress levels associated with Force Reductions. It is likely that financial security considerations weigh most heavily on this sub-group of the active-duty population.

## DISCUSSION

Using a representative sample of the U.S. Army population in Europe, this study has shown a clear and substantial relation between experienced life stress and depression symptoms. While comparative data on stress from previous years are not available, the recent period has clearly been one of increased turmoil and demands for Army personnel in the forward-deployed environment. Since 1990, Army forces stationed in Europe have been reduced by over half, from 213,000 to just over 100,000. This vast organizational change has resulted in increased workload for many, and greater uncertainty about the future. Personal, family and professional responsibilities are greater, and are often in competition for the time of the service member. The present study provides some empirical confirmation of the common anecdotal observation that "drawdown stress" is high in the forward deployed force, and that many service members are suffering negative psychological effects.

STEPWISE MULTIPLE REGRESSION RESULTS  
 PREDICTING: DAYS OF DEPRESSION  
 TOTAL SAMPLE: SOLDIERS, SPOUSES, CIVILIAN (N=5,235)

<u>PREDICTOR VAR</u>	<u>R</u> <u>SQUARE</u>	<u>BETA</u>	<u>E</u>	<u>SIG.</u>
1. STRESS: PERSONAL	.167	.279	264.88	.0000
2. STRESS: PROFESSIONAL	.213	.227	269.59	.0000
3. STRESS: FAMILY	.216	.075	20.44	.0000
4. STRESS: R-I-F	.217	.052	9.48	.002
5. STRESS: DRAWDOWN	.218	-.041	5.85	.01

MODEL: MULTIPLE R=.47 F = 270.54, p < .0000, df = 5, 5229



STEPWISE MULTIPLE REGRESSION RESULTS  
 PREDICTING: RECEIVED COUNSELING IN PAST YEAR  
 TOTAL SAMPLE: SOLDIERS, SPO'JSES, CIVILIAN (N=5,235)

<u>PREDICTOR VAR</u>	<u>R</u> <u>SQUARE</u>	<u>BETA</u>	<u>F</u>	<u>SIG.</u>
1. STRESS: FAMILY	.02	-.143	105.38	.0000

MODEL: MULTIPLE R=.14 F = 105.38, p < .0000, df = 1, 5234

STEPWISE MULTIPLE REGRESSION RESULTS  
 PREDICTING: DAYS OF DEPRESSION  
 SOLDIERS WITH WORKING SPOUSES (N = 1,581)

<u>PREDICTOR VAR</u>	<u>R</u> <u>SQUARE</u>	<u>BETA</u>	<u>F</u>	<u>SIG.</u>
1. STRESS: PROFESSIONAL	.134	.234	81.08	.0000
2. STRESS: FAMILY	.189	.227	25.81	.0000
3. STRESS: PERSONAL	.201	.075	18.72	.0000
4. STRESS: R-I-F	.205	.052	9.05	.002

MODEL: MULTIPLE R=.45 F = 95.99, p < .0000, df = 4, 1577

# STEPWISE MULTIPLE REGRESSION RESULTS

PREDICTING: DAYS OF DEPRESSION

"DUAL CAREER" SOLDIERS WITH ARMY SPOUSES (N = 280)

<u>PREDICTOR VAR</u>	<u>R</u> <u>SQUARE</u>	<u>BETA</u>	<u>F</u>	<u>SIG.</u>
1. STRESS: PROFESSIONAL	.064	.217	12.14	.0006
2. STRESS: FAMILY	.079	.127	4.10	.04

MODEL: MULTIPLE R=.28 F = 10.98, p < .0000, df = 2, 278

# STEPWISE MULTIPLE REGRESSION RESULTS

PREDICTING: DAYS OF DEPRESSION

SOLDIERS WITH 2+ CHILDREN & WORKING SPOUSES = 573)

<u>PREDICTOR VAR</u>	<u>R</u> <u>SQUARE</u>	<u>BETA</u>	<u>E</u>	<u>SIG.</u>
1. STRESS: PROFESSIONAL	.144	.261	36.58	.0000
2. STRESS: FAMILY	.182	.211	24.58	.0000
3. STRESS: R-I-F	.204	.151	14.64	.0000

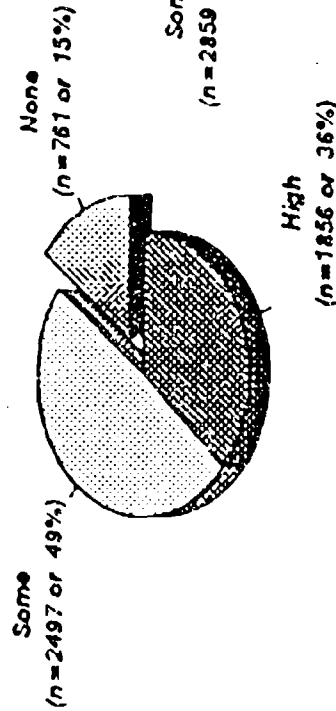
MODEL: MULTIPLE R=.45    F = 45.69, p < .0000, df = 3, 570

# USAREUR Drawdown

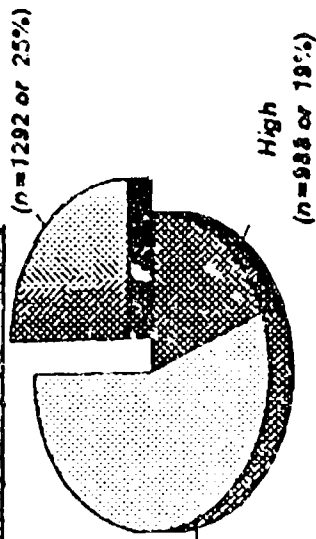
## Life Stressors

• Survey respondents were asked to rate the levels of stress they were experiencing in four areas of their life:

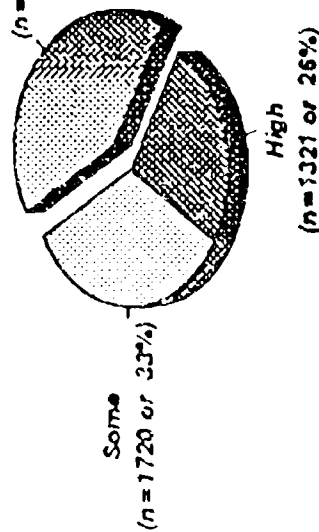
### Professional Duties



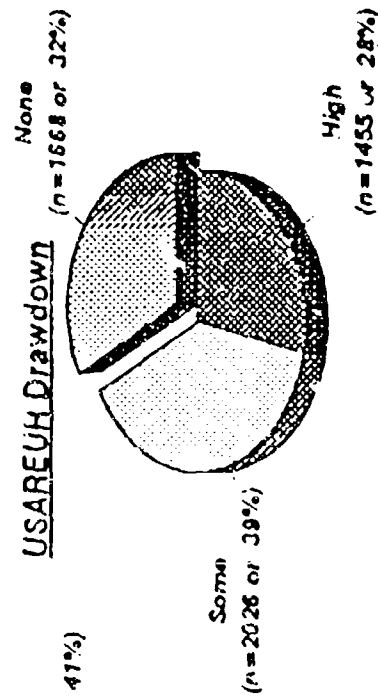
### Family Responsibilities

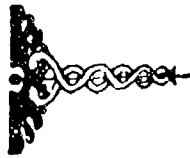


### Reduction in Force



### USAREUR Drawdown





## HEALTH AND SAFETY ISSUES



Use This Scale To Answer Questions 28-38

	none	1 day	2 days	3 days	4 days	5 days	6 days	7 days
--	------	-------	--------	--------	--------	--------	--------	--------

How Many Days Have You Had These Feelings Within The Last Week:

- |    |  |    |                             |
|----|--|----|-----------------------------|
| 28 | Felt I Couldn't Get Going                            | 34 | Felt Lonely                 |
| 29 | Felt Sad   | 35 | Felt Happy                  |
| 30 | Had Trouble Getting To Sleep Or Staying Asleep       | 36 | Felt That People Dislike Me |
| 31 | Felt Everything Was A Effort                         | 37 | Did Not Feel Like Eating    |
| 32 | Had Trouble Keeping Your Mind On What You Were Doing | 38 | People Are Unfriendly       |
| 33 | Felt I Couldn't Shake The Blues                      |    |                             |